DEPARTMENT OF MANAGEMENT Services

Communication and Information Technology Services
4030 Esplanade Way, Suite 115
Tallahassee, Florida 32399-0950
Tel: 850.487-9971
Fax: 850.922.5162
www.dms.MyFlorida.com

Governor Charlie Crist

Secretary Linda H. South

October 18, 2010
Comments
Electronic Filing
Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, SW, Room TW-A325
Washington, D.C. 20554

Re: *700 MHz Interoperable Broadband Public Safety Network*

Florida Department of Management Services
COMMENTS on the FCC 700 Waiver Order Filing Questions

Our thoughts on the FCC request for comments below are based on our understanding that the questions relate to governance standards, methodology and process to establish and maintain a nationwide seamless wireless broadband Internet to support the core mission of public safety jurisdictions. We believe that governance is of the utmost importance in light of various concerns and objectives between the commercial interests of manufacturers, integrators, network operators and public safety.

While substantial attention is focused on technology and speed of network deployment the impacts of inadequate time and effort for States to address governance we would expect to see an increase in costs and risk to future seamless operational performance. We caution that without adequate awareness, understanding and inclusion of public safety principles that have the greatest knowledge of governance models and process that has worked in their State key decisions could be made in haste with undue influence from well meaning technologists and vendors.

Lessons learned from past public safety efforts have taught us the importance to establish governance, collaborate, plan, and coordinate before implementing the technology – particularly for interoperable communications. SAFECOM published an "Operational Guide for the Interoperability Continuum Lessons Learned from RapidCom" dated 09-25-05. This publication reiterated the Interoperability Continuum. Today, the Interoperability Continuum includes data on the Technology lane. Technology alone does not provide a solution for interoperable communications, Governance, Standard Operating Procedures, Training and Exercises, and Usage must be developed in parallel with Technology and at the same level along the continuum to truly appreciate interoperability.

We are recommending a governance approach in Florida that leverages the Domestic Security Oversight Council, specifically the Florida Executive Interoperability Technology Committee (FEITC), or its equivalent. The governance structure of the DSOC includes interoperable communications committees at the statewide and regional levels. Florida is referencing DHS' "Establishing Governance to Achieve Statewide Communications Interoperability" as we further governance in Florida. Administering the 700 MHz broadband network should take advantage of governance already in place, but realize the realm of responsibility and commitment required to succeed (i.e., additional staffing and other resources). Our office co-chairs the FEITC as well as the statewide interoperable communications committee, and we participate in regional interoperable communications committees. The other lanes of the interoperability continuum should also be accomplished within the DSOC structure.

The FCC chartered the Public Safety National Communications Committee on February 25, 1999, to provide recommendations for 700 MHz public safety spectrum – primarily the narrowband channels. One example of this effort is the February 25, 2000 report to the FCC. This followed a similar process that governed the planning and use of public safety 800 MHz (known as NPSPAC in the 1990s). Similarly, the FCC should charter a national committee for the public safety broadband spectrum or leverage the Governance already in place at the national, state and local level – such as ERIC, DHS-OEC, NIST, PSST, FEITC in Florida, etc. The 700 MHz Broadband data efforts should be contingent upon Governance being in place which would be responsible for collaborating, planning, and coordinating deployment of technology. Similar to how CASM[1] is administered, but on a larger, more complex scale, nationwide, statewide, region-wide, countywide and citywide administration should be established with secure access and use. Our office is a statewide administrator of CASM. Access to CASM requires HSIN or similar level background clearance. Similar to HSIN, FCIC/NCIC, an equivalent, or leveraging one of them, security clearance should be required to become an administrator.

We recommend that the FCC issue guidelines to the designated state agency or statewide committee for coordination between neighboring states; states should issue guidelines for coordination between regions or counties within the state; designated regions or counties within the state should issue guidelines for spectrum use within that region.

Specific to the Technology lane, the SAFECOM Statement of Requirements, Volume 1 and Volume 2 should be leveraged for how broadband might be deployed by multiple interests and applications yet provide a statewide and nationwide enterprise network of interoperable communications. This is a multi-volume set of documents. In it, the Public Safety Architecture Framework is identified, which is a 3-volume set and a trial report. Volume III might offer a model that can be adapted to broadband data on a nationwide scale as well as statewide, region-wide, countywide and citywide.

The 700 MHz broadband effort has presented a paradigm shift for public safety agencies, critical infrastructure industries, non-government organizations, commercial wireless carriers, land-based

[1] CASM is a Communications Asset Survey and Mapping tool administered in Florida and other States with secure access, with two statewide administrators, and one regional administrator for each of Florida's seven domestic security regions. The State of Indiana has a web site dedicated to their CASM activities.

network providers, and government to accomplish the purpose of the network in a coordinated effort. Traditional stovepipe thinking for jurisdictional public safety networks may feel threatened by interoperable efforts while preserving their operable security. With the proper Governance, SOPs, Technology, Training and Exercises, and Usage, administering a nationwide interoperable data network should be within our reach. It will rely on everyone working collaboratively and cooperatively for a common goal. Otherwise, public safety will find itself with an operable network for specific needs at the expense of statewide and national interoperable needs. In order to be more cost effective in the long term, we need to prevent premature expenses meeting short-term jurisdictional interest at the risk of a higher long-term expense.

Issue #1: in regard to eligibility under Section 337:

With respect to the first question, we note that the initial *Waiver Order*, consistent with the tentative conclusion in the *700 MHz Third FNPRM*, limited network users to those entities under Section 337 of the Communications Act whose "sole or principal purpose" is "to protect the safety of life, health, or property" and who meet the remaining requirements of Section 337. We note, however, that several petitions include signatories such as investor-owned utilities or other entities whose eligibility is not readily apparent. We seek comment on how to address these petitions.

We believe that eligible spectrum users should be limited to organizations whose focus and priority is on ensuring public safety needs are met. We also recognize the need to provide access to and usage of the network to public safety support organizations within the context of critical infrastructure industries (CII) and non-government organizations (NGOs). We recommend the FCC ensure that eligible spectrum users are safeguarded. During critical incidents or emergencies the public safety entities would have priority over all secondary subscribers. Public Safety Organizations that are granted waivers should be permitted to allow other units of government to utilize or subscribe to the network. This would allow more cost efficient use of the spectrum for both public safety and other government users.

For those investor-owned utilities or others whose eligibility is not readily apparent, they should only have access if they are in the context of critical infrastructure industries (CIIs) or non-government organizations (NGOs). CIIs and NGOs should be allowed subscriber unit access to a public safety infrastructure under a sharing agreement with the public safety agency responsible for the infrastructure.

Secondary use of the public safety spectrum will introduce expanded commercial and public interest purposes. The potential benefit of allowing secondary users is to generate additional funds to support the build out of infrastructure and ongoing maintenance and support of a nationwide network. Regarding commercial services for public access/use of public safety 700 MHz broadband spectrum, that may be possible so long as the public safety agencies have priority use of its spectrum with "quality assurance" that the bandwidth will be made available upon demand for throughput. Hardening commercial sites where the public safety spectrum is implemented will allow the commercial carriers to market that for their commercial services as well, opening up opportunities for higher level of expectations from its commercial subscribers.

Issue # 2: addressing overlapping requests;
With respect to the second question, we note that it appears several recent waiver submissions either overlap geographically with each other, or with previously granted waivers.[8] In the *Waiver Order*, the Commission expressed a clear preference for waiver requests at the state level, and included provisions requiring smaller jurisdictions that were granted relief to seek approval of the state before pursuing deployment.[9] In this regard, the apparent conflict between the waiver requests of New York City and the State of New York were also resolved, given the State's consent and the coordination among the parties. Should we use the same mechanism to resolve any conflicts with respect to these more recent waivers?

Overall we recommend that spectrum authorization and planned use should be coordinated across public safety stakeholders in a state. We recommend that a state level governmental unit be designated by the State's public safety stakeholders as the lead spectrum manager for that state. If there is no state level organization capable of filling that role then the State's public safety stakeholders should designate a capable public safety governmental organization within their state to perform the function.

Many public safety stakeholders in Florida have yet to fully read and understand the National Broadband Plan, the intent and implications for Public Safety initiatives and future funding and operational requirements for the national public safety network. We recommend that the FCC proceed cautiously before issuing additional spectrum waivers until more state stakeholders have had a chance to become aware, organize and designate a lead organization for spectrum management. We recognize that some stakeholders are better prepared with funding, resources and understanding to take advantage of a spectrum waiver. The public safety network initiative issues are broad, complex and involve many organizations that are commercial and public and cannot all be pre planned before we start. The commercial Internet is similarly broad, complex and serves many stakeholders. The Internet did not start with a comprehensive plan. The Internet evolved and is evolving due to the leadership and resources of organizations that had them.

In Florida the Department (DMS) is reviewing how Florida has approached public safety inter-governmental governance for coordination and management of current spectrum and communications management. We believe the State and local public safety leadership stakeholders should enter into a planning process with all public safety stakeholders represented to increase awareness and understanding to build on our past collaboration and coordination efforts in order to develop a Florida Public Safety Mobile Broadband Plan.

An example of cooperative governance in Florida is the Florida Executive Interoperability Technology Committee (FEITC). The Department's Division of Telecommunications (DivTel) and the Department of Emergency Management (DEM) co-chair the Florida Executive Interoperability Technology Committee (FEITC). Recent efforts by the State Working Group – Interoperable Communications Committee (co-chaired by DivTel and Lake County) have been attempting to establish interoperable governance within the Domestic Security Oversight Council in order to meet DHS guidelines. The FEITC is expected to encompass all aspects of the public safety networks coordination for planning and management with

its statewide oversight for all public safety agencies at all levels of government as well as include the benefit of CIIs and NGOs. DHS' interoperability continuum has "data" on the "Technology" continuum, but requires governance to parallel it on the "Governance" continuum. The FEITC will likely be responsible for updating the Statewide Communications Interoperability Plan (SCIP), which encompasses and provides directions for all plans in Florida for public safety communications. We are recommending to the FEITC that the public safety mobile broadband network planning be incorporated into the SCIP.

Such plans for broadband will need to reflect the National Broadband Plan and intent. We recommend that each State develop these plans within their own organizational context. We recommend that each state undertake a comprehensive review process to create a baseline of the current situation and what public safety stakeholders will need from a public safety broadband network. We recommend such planning to include but not limited to:

1. Review past inter-governmental governance approaches in managing spectrum to ensure common understanding and appreciation of what works well and what does not within each state
2. Review the 700 MHz FCC spectrum plans, issues, requirements, objectives and priorities, the National Broadband Plan to create awareness and understanding
3. Inventory current systems, capabilities, coverage and plans; LMR, P25 including current and planned budgets. This will baseline infrastructure and budget understanding for potential leverage points
4. Develop 700 MHz public safety priorities for the state; define what the goals and priorities of the services will be once the network(s) are built out.
5. Develop the State's approach to inter-governmental 700 MHz governance that would include;
    a. Deployment criteria
    b. Funding strategies and business cases
    c. Training requirements
    d. Equipment procurement requirements and procurement strategies

Issue # 3: Issues related to the timing of Bureau action and the volume of waivers received in relation to the Commission's overall interoperability goals;

With respect to the third question, we seek comment on the appropriate timeframe for the Bureau's action on these additional waivers. We also note, however, a number of additional factors for consideration: the volume of additional waiver requests submitted; the ongoing nature of Long Term Evolution standards and equipment development; the ongoing work of the Emergency Response Interoperability Center (ERIC); related demonstration network efforts sponsored by the Public Safety Communications Research (PSCR) program (which is a partnership between the National Institute of Standards and Technology (NIST) and the National Telecommunications and Information Administration (NTIA)) and the District of Columbia; and the recent submission of comments to the Bureau's Public Notice on technical standards public safety broadband deployments.

Florida recommends that the FCC proceed with the current waivers with the condition that States must demonstrate a commitment to review and establish a comprehensive governance plan for all current and future waiver requests. Waiver grantees should not proceed without agreeing to cooperate with a State designated lead in developing the State's governance plan.

If we are to achieve a level of seamless interoperability and performance across a network of networks for public safety, we need to address governance across the myriad of potential deployment models and deployment responsible parties. The only model we are aware of that reflects that level would be the Commercial Internet model. While LTE as a technology standard has the potential to provide some degree of technical interoperability there are concerns for interoperability in the performance of public safety applications as disparate networks are interconnected that are to ensure public safety responders are able to carry out their mission across jurisdictions.

We believe that public safety nationally will need an a well organized forum, framework and process to ensure public safety stakeholder business requirements are prioritized into manufacturer and operator plans for developing and providing products and services in support of a national public safety network. The framework will need to include public safety stakeholders ranging from tribal to local to state to inter-state to federal levels. The framework will need to encompass; security, critical infrastructure, communications technology, logistics and equipment, operations and planning, testing and training. There are a number of functioning forums and organizations to look to for best practices within the public safety and technology communities. We recommend the FCC evaluate such cooperative and collaborative models as; the Internet Engineering Task Force (IETF) http://www.ietf.org/about/ and Federal Highway Administration ITS program http://www.its.dot.gov/.

Some state governments like Florida operate public safety communications in partnership with commercial operators for MPLS broadband networks and services that provide for QOS and service level agreements that meet public safety security and performance needs. In some cases such as in Florida those networks are already used to provide legacy narrowband public safety interoperability. We recommend that each state needs to determine how their existing broadband networks can be fully leveraged to reduce the cost of the planned public safety mobile broadband networks. In many states the Department of Transportation's already have ITS broadband backbones and play a role in public safety. We will need to determine how those assets can be fully leveraged to reduce the cost of the network.

(2) Should the Bureau require any further waiver recipients to wait until initial interoperability rules are adopted before proceeding?

Florida recommends that the FCC wait until a State's public safety stakeholders have had a chance to review and update their Statewide Communications Interoperability Plan (SCIP) that incorporates the requirements and objectives of the Public Safety Broadband Network.

(3) Should we limit the number of waivers, require consolidation of regional networks, or otherwise act to avoid an excessive number of PLMN IDs?

We do not recommend a limit on the number of waivers as long as a State has completed a Statewide Communications Interoperability Plan (SCIP) that incorporates the requirements and objectives of the Public Safety Broadband Network, and the subsequent waivers granted meet the requirements of the SCIP.

(4) Will addressing additional deployments on a waiver basis adversely impact the Commission's interoperability goals?

We believe deployments on a waiver basis can most effectively be managed as long as they are accomplished through each State's governance plan and updated Statewide Communications Interoperability Plan (SCIP).

(5) Are there additional conditions or circumstances that would guard against this outcome?

(6) Should the Bureau allow additional interoperability showings to be filed?

(7) Are there changes to that process that would be beneficial?

While the Federal government level has come a long way in their thinking, preparing and planning regarding the public safety network the states and local government stakeholders are catching up. Many are relying on the commercial sector for information and guidance. We believe many states will need more time to organize, collaborate and develop a rational approach. Government budget pressures affect staff availability and travel which will impact how quickly we can move to prepare and develop governance plans.

By requiring a designated state lead for organization (state or local level) for spectrum management within a state to perform the role of spectrum management and public safety network planning the FCC will achieve a greater degree of collaboration and reduced number of waiver filing conflicts to manage. We recommend that the lead organization have the responsibility to coordinate all state stakeholders to develop a Public Safety Broadband Network Strategy document incorporated into the State's Statewide Communications Interoperability Plan (SCIP) that is reviewed before waivers are granted.

We believe this kind of approach is needed to minimize the ultimate costs to the taxpayers and achieve the intent, goals, purposes and public safety business needs for using this spectrum. To accomplish these objectives a state will need to minimize isolated and fragmented planning, procurement, deployment and operations. Stakeholder participation in the process is key in preparation for; awareness, planning in each state or there will be justified cause for concern and hesitance to collaborate. Since federal funding alone will not cover 100% deployment coverage in any given state there is a natural question of being left out of coverage when federal funding and state deployments occur. In every state there are many separate public safety agencies and by designating a lead organization whose job it is to solicit input from all agencies to establish guidelines for agreements, the burden placed on each of these individual agencies should be reduced. This in turn would minimize the

number of required agreements based on established guidelines that can provide increased commonality and reduces transaction costs while allowing for some degree of divergence between agreements (which promotes agreements that serve regional needs).

Similarly to the Public Safety National Coordination Committee and the National Public Safety Advisory Committee, we believe that the FCC should issue strong guidelines and requirements and provide states with adequate time to organize and prepare we will be able to affect greater coverage with available funding and streamline operations and management.

Some state public safety stakeholders will not be sufficiently funded and staffed to carry out comprehensive preparation and planning. We recommend funding be made available to assist qualified states to apply for and if warranted receive funding to carry them out. We recommend the FCC establish informational sharing mechanisms that facilitate and disseminate minimum requirements, standards, guidelines and best practices across the continuum to assist in the development of their plans, procurements and operational management. We recommend the FCC consider promoting multi state procurements approaches that can result in greater economies of scale and operational consistency.

As the FCC considers how to manage governance and funding for the national public safety network we recommend an analysis be conducted into how NTIA managed the ARRA BTOP and SBDD grant programs. ARRA BTOP was open to anyone to apply while SBDD was open only to State "designated" entities. Florida participated in both programs and recommends NTIA's SBDD program approach as a simpler and less costly approach to management applications and awards than the ARRA BTOP program.

Issue # 4: Any impact such additional waivers may have on the budget of the Public Safety Spectrum Trust (PSST). How will these additional waivers impact that budget? Should we permit or require the same fees for any additional leases? Should the administrative fees for all parties be adjusted? Should a new or amended budget be submitted?

Should the FCC desire the PSST to take on the entire burden of managing hundreds of waivers per state then we recommend a full review of that scope of work before committing to a budget and subsequent fee requirements to adequately fund the PSST.

If the FCC decides to create a hierarchy of spectrum management delegating management within a state to a designated lead entity then it would substantially lower the cost impact to PSST and increase the cost and resource impact to such a designated state entity. It is unclear if a State lead will have sufficient funding to perform those functions. Some state public safety organizations will be better positioned to absorb those costs and responsibilities than others. Effective management of the spectrum will require staffing. The question for each state is who or which organizational approach will be best positioned with resources and with the lowest funding requirements to perform those functions, and will there be any federal funding mechanisms available to assist those efforts?

In Florida the FEITC has been referenced with previous questions, the FEITC will require staff leveraged from participating agencies committed to accomplish task assignments on a statewide scale on behalf of all public safety agencies. Participating agencies will need to absorb the responsibility or establish new positions to employ staff to perform task beyond the participating agencies core responsibilities, but associated, or seek legislative authority to do so. Otherwise we are concerned that our efforts will stalemate unintentionally. Past experience has shown leveraging existing employees without replacing their roles and responsibilities with new tasks resulted in compromises to new and existing tasks. The ability to do more with less has reached, if not exceeded our ability to scale.

Adequate comprehensive planning is essential for LTE which as an evolving standard offers a range of options and diverse implementations. It is in our attention and planning for that range and diversity details that we will find issues that impact costs and our collective ability across manufacturers, operators and public safety to successfully procure, deploy and operate such networks. Especially when the public safety network must converge with multiple commercial LTE networks from disparate operators. The business requirements of the FCC plan and public safety needs must be thoroughly understood and jointly planned for across manufacturers, operators and public safety to achieve the plans goals.

A joint planning process and guidelines development are needed that promote commonality to reduce transaction costs, but shows how such agreements should also consider and accommodate some forms of technical diversity that can emerge across implementations

The LTE standard may support a range of technical implementations, in which different degrees of responsibility for these real-time interventions can be assigned to individual first responders, to more centralized representatives of public safety, or to operators of commercial networks.

Given there are non-public safety use cases in operational public safety networks more in the planning phase by vendors and stakeholders for funding business cases that will augment potential federal funding these need to be addressed in planning within each State and nationally. These potential additional uses if allowed by federal rules and their impacts to the network should be thoroughly vetted and understood as they may be essential to fully fund and implement nationwide coverage for public safety.

Respectfully submitted,
Charles Ghini
Director, Division of Telecommunications
Department of Management Services
State of Florida
4030 Esplanade Way Suite 115
Tallahassee, Florida 32399